IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.: 10/821,504

Applicant: Jeff S. Eder

Filed: December 23, 2002

Examiner: Sigfried Chencinski

Art Unit: 3692

Docket No.: AR - 65

Customer No: 53787

DECLARATION UNDER RULE 132

I, Rick Rauenzahn, do hereby declare and say:

My home address is 529 Calle don Leandro, Espanola, New Mexico. I have a B.S. degree in chemical engineering from Lehigh University, an S.M. degree in chemical engineering from The Massachusetts Institute of Technology and a Ph.D. in chemical engineering from The Massachusetts Institute of Technology. I have worked in the mathematical modeling field for 25 years concentrating in the disciplines of fluid mechanics, turbulence modeling, numerical methods for partial differential equations, radiation hydrodynamics, and strength of materials. I also have extensive knowledge of computer system administration, particularly for Windows-based, Linux, and UNIX systems. I have been employed by Los Alamos National Laboratory and Molten Metal Technologies for the past 24 years.

I further declare that I do not have any direct affiliation with the application owner, Asset Reliance, Inc. or with its licensee Kantrak, Inc. As described in prior declarations I have met the inventor who is the President of Kantrak.

On April 22, 2006, I was given a copy of U.S. Patent Application 09/688,983

entitled "An automated risk transfer system" filed in the United States Patent Office on October 17, 2000. Until that time I had not read the patent application. U.S. Patent Application 10/821,504 entitled "A Business Activity Management System" is a continuation of application 09/688,983 and as such has the same specification and drawings. I have studied the entire specification in order to closely analyze the claims and drawings. I am totally familiar with the language of the claims and conversant with the scope thereof. I completely understand the invention as claimed.

On June 25, 2008 I was provided with a copy of U.S. Patent Application 2001/0053991 by Eric W. Bonabeau (hereinafter Bonabeau). Until that time I had not read the patent application and I have not discussed it with anyone. Bonabeau describes aspects of developing market space ecosystem models that apparently have utility in selecting business models for a commercial enterprise that will optimize a metric (abstract, paragraph 13). Business models identify a combination of features (VP), prices (RM) and operational methods (OA) used in producing existing and planned offerings for a business (paragraph 23). Bonabeau also mentions but does not explain that if a stock market system is included in the market space model, then the metric being optimized may be able to include market capitalization (paragraph 11, paragraph 86).

Based on my experience and training in the field of mathematical modeling and electronic data processing, I have concluded that the Bonabeau system does not have any relevance to the system and method disclosed in application 09/688,983/10/821,504. There are several reasons for this:

1) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a commercial enterprise by analyzing a model of enterprise value and risk teaches and relies on the use of different valuation methods for existing offerings (cash flow), planned offerings (real options for growth) and market sentiment. Bonabeau teaches away from this approach as it requires the use of a single category of metric to evaluate the performance of both existing and planned offerings (paragraph 13). Bonabeau does not teach or suggest anything about

market sentiment and cannot support its analysis or optimization (see item 8 for more detail).

- 2) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a commercial enterprise by analyzing a model of enterprise value and risk teaches and relies on the fact that the levels of the components of current operation value (revenue, expense and capital change) and market sentiment are a function of the performance of a plurality of elements of value (i.e. brands, customers, employees, etc.) and/or a plurality of market value factors. In particular, the method disclosed in 09/688.983/10/821,504 relies on the development of summaries of element of value and market value factor performance (i.e., vectors or models) that can be used as inputs to predictive models that determine their impact on the levels of the components of current operation value and market sentiment. The use of element of value summaries, market value factor summaries, vector inputs and predictive models is not taught or suggested by Bonabeau. Bonabeau teaches away by relying on a combination of three part business models, expected behavior models for customers and suppliers and simulation to estimate external prices and market share (paragraphs 94 and 95) while ignoring the other elements of value and the other market value factors.
- 3) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a commercial enterprise by analyzing a model of enterprise value and risk relies on a calculation of changes to the cost of capital for the business that is determined by the relative strength of the elements of value as quantified by a DEA analysis in order to value real options. Bonabeau does not teach or suggest anything related to DEA analysis or real option valuation and teaches away from the use of real options as discussed previously.
- 4) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a commercial enterprise by analyzing a model of enterprise value and risk teaches and relies on scenario analysis. The inputs to the summaries of element of value and external factor performance mentioned under item 2 are analyzed in order to

identify the expected range of values for the summaries under different scenarios. The financial performance of the business is then simulated using the identified ranges under the different scenarios. The results from the scenario analysis are then used as inputs to a multi-criteria optimization analysis. Bonabeau does not teach or suggest element of value or external factor summaries (as discussed previously), the identification of ranges for element of value or external factor summaries, the development of scenarios and/or the use of scenario simulation results as inputs to an optimization analysis. Bonabeau teaches away by teaching single criteria optimization via the genetic evolution of different combinations features (VP), prices (RM) and operational methods (OA) for business models in a market space model (paragraphs 20 through 30).

- 5) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a commercial enterprise by analyzing a model of enterprise value and risk teaches and relies on the use of element of value and sub-element of value level analyses. The Bonabeau disclosure teaches away from the use of element of value level analyses as it teaches an item level focus on the specific type and number of machine required for each unit of good or service (paragraph 70).
- 6) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a commercial enterprise by analyzing a model of enterprise value and risk teaches and relies on measuring a number of different types of risk by element of value and external factor for each category of value. 09/688,983/10/821,504 also teaches risk management via risk transfer or risk reduction program management. Bonabeau does not teach or suggest anything related to measuring any type of risk and/or managing any type of risk via risk transfer or risk reduction program management. Bonabeau teaches away by teaching the selection of robust combinations of features (VP), prices (RM) and operational methods (OA) for business models in order to minimize the need for risk management (paragraph 59).
- 7) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a

commercial enterprise by analyzing a model of enterprise value and risk teaches and relies on the use of up to four different methods for improving the financial performance: improving cash flow, improving real option value, improving market sentiment value and/or reducing risk (via management or transfer). Bonabeau teaches away from each of these four methods as it teaches that there is only one method for improving financial performance: improving the fit of the three part business models (features (VP), prices (RM) and operational methods (OA)) within a market space ecosystem (abstract, paragraphs 20 through 30).

- 8) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a commercial enterprise by analyzing a model of enterprise value and risk teaches and relies on the analysis of market sentiment using predictive models and the element of value summaries mentioned previously. Also as mentioned previously, Bonabeau cannot support the analysis and/or optimization of market sentiment because it has no capability for identifying a relationship between the specified variables (features, prices, operational methods, customer behavior and supplier behavior) and market sentiment. This same limitation prevents the Bonabeau system from analyzing or optimizing derivatives and investments.
- 9) the method disclosed in 09/688,983/10/821,504 for optimizing activities for a commercial enterprise by analyzing a model of enterprise value and risk teaches and relies on the fact that building relationships with customers and vendors improves value. Bonabeau teaches away from this approach by teaching a method for business model optimization where the propensities for customers to switch suppliers each period and for suppliers to be changed every period in response to price changes are parameterized in a simple fashion as an input to the business model adaptation process. Thus, Bonabeau's method provides no means to access the enterprise value that arises by forming said relationships.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both

under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patents issuing thereon.

Signed,

/Rick M. Rauenzahn/

Rick M. Rauenzahn

Date: July 11, 2008